

## Protecting the Cuyahoga in the Year of the River

by Volunteer Sustainability Reporter Emily Bryant

In 1969, the Cuyahoga River became a symbol of environmental degradation when it caught fire in Cleveland. Forty years later, successful efforts to restore the wellbeing of the entire Cuyahoga watershed are being celebrated and furthered. Here at Cuyahoga Valley National Park (CVNP), Ecologist Kevin Skerl has become active in watershed stewardship through research, education, and community empowerment.

Skerl's motivation for getting more involved in watershed protection stemmed from the 2003-2004 floods, which caused millions of dollars in damage to park infrastructure. Since then, Skerl has investigated the relationship between upstream land use choices and downstream water quality. Specifically, he has demonstrated how increases in the land's "imperviousness" outside the park can harm the Cuyahoga River and its tributaries flowing through the park. Highly impervious surfaces such as roads, parking lots, and roofs cannot absorb storm water the way forests, wetlands, or meadows can. Instead, the storm water flushes quickly into nearby waterways, carrying with it eroded soil, pesticides, and other pollutants. Stream water quality starts degrading at as little as 10% imperviousness. In addition, these rapid pulses of storm water can lead to downstream flooding.

It can be difficult to maintain and protect water quality when 46 different communities impact the waters flowing through Cuyahoga Valley National Park. Of the more than 30 named tributaries and many smaller streams that flow into the Cuyahoga River, only two are completely within the CVNP boundaries and therefore protected. "We need to share responsibility. We are all in the watershed together. All our decisions affect those downstream," Skerl explains.

In recent years, Skerl has focused on protecting the watershed through community involvement. At first he met with community leaders himself, but he quickly realized that he could not be everywhere a watershed advocate was needed. Now he is recruiting and training a cadre of volunteer Watershed Stewards to help. When development proposals are discussed at community meetings, these and other local residents can promote watershed-based planning and encourage environmentally sensitive approaches.

Skerl and other watershed advocates recommend using Low-Impact Development (LID) techniques to enable built areas to manage storm water in ways that mimic nature. LID projects minimize impervious surfaces and maximize the dispersion and natural absorption of storm water. These techniques include rain barrels, rain gardens, pervious pavements, and green roofs. Skerl believes that protecting nature also protects the health and economic wellbeing of local citizens. It is in the best interest of each community to maintain quality drinking water and to prevent flooding with this kind of ecologically sensitive design.

Skerl has also been involved in other watershed restoration efforts impacting the national park. He encouraged The City of Brecksville, for example, to install catch basins to intercept sediment and debris

in order to improve water quality downstream. He also participated in the development of a watershed plan for Chippewa Creek and is now assisting on a similar plan for Brandywine Creek.

When it comes to watershed stewardship, the voices of proactive citizens are the most crucial element. In 2009, we celebrate the Year of the River with pride in what has been accomplished and a commitment to achieving new goals. The Cuyahoga River watershed is an incredible natural resource, becoming sustainable once again through the song of our citizen's voices preserving and cleansing its waters.

## **Get Involved!**

- Volunteer as a Watershed Steward at Cuyahoga Valley National Park. Apply online by visiting [www.volunteer.gov/gov](http://www.volunteer.gov/gov) and searching under zip code 44141 for the position.
- Attend [watershed council meetings](#) in your community and/or get involved in Cuyahoga River [watershed planning](#).
- Learn more about [watershed stewardship](#) and [Low-Impact Development](#).
- Install a rain barrel or a rain garden. Various organizations offer workshops in Northeast Ohio.
- Replace sections of lawn with taller, more natural vegetation.